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**HALAL BAKERY PRODUCTS PURCHASE INTENTION: FROM**  
**THE LENS OF THEORY OF PLANNED BEHAVIOUR**

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*Abstract*

Bakery products have emerged as one of the fast-growing food industries in Malaysia. Nevertheless, the halal issues related to the products, including the origin of ingredients used in the bakery products, are raised. To date, consumers are concerned with the sources of ingredients used in food production, hence influencing their purchase decision. Consumers' consciousness, perception, and willingness to accept the halal concept have greatly proven its influence on halal food purchasing. Therefore, this study assessed the correlations of the attributed embedded in the Theory of Planned Behaviour (TPB), namely attitude, subjective norms, and perceived behavioural control, with purchase intention towards halal bakery products among consumers. Besides, the most influential factor that influenced the purchase intention towards halal bakery products would be determined. In this study, a set of validated questionnaires was distributed to 500 purchasers of bakery products at selected bakery outlets in Petaling district, Selangor. Out of the 500 distributed questionnaires, 476 questionnaires were usable and subjected to data analyses using SPSS software version 24. The outcomes showed that all the TPB attributes significantly and strongly influenced consumer's purchase intention ( $p < 0.05$ ), with attitude ranked as the most influential factor that predicted consumers' intention to purchase halal bakery products. The outputs of this empirical study can be applied by food manufacturers to develop effective strategies in emphasising all the TPB attributes to enhance consumer's purchase intention towards halal bakery products.

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## 1. Introduction

Halal food appears to be the most vital sector within the food industry sphere. Following Islamic belief, halal food should reflect the concept of Halal and Tayyib, wherein all ingredients used should be free from unclean and toxic substances (Alzeer, Rieder, & Hadeed, 2018). Accordingly, Shari'ah-compliant halal products neither contain haram (prohibited) or harmful ingredients nor misuse of labour or environment (Mohamed Omar, Nik Mat, Imhemed, & Ali, 2012). It is of utmost significance to ascertain that the ingredients do not come into contact with non-halal ingredients (Nakyinsige, Man, & Sazili, 2012). Simply put, halal food should have the highest standard of cleanliness and free from any potential toxic, unclean or impure ingredients.

Khalek (2018) reported that Malaysia is a pioneer and the main producer for halal products encompassing consumer goods, a wide range of food types, including baked goods. In Malaysia, baked goods are enjoyed as a substitute for main meals and, also can be consumed during afternoon tea. Nindiani, Hamsal, and Purba (2018) claimed that cakes are top bakery products consumed by people from all walks of life on a global scale. Although numerous studies have looked into halal food consumption among Malaysians (Golnaz, Zainalabidin, Mad Nasir, & Eddie Chiew, 2010; Rahman, Ahmad, Mohamed, & Ismail, 2011; Shah Alam & Mohamed Sayuti, 2011; Rezai, Mohamed, & Shamsudin, 2012; Aziz & Chok, 2013; Khalek, 2014; Haque, Sarwar, Yasmin, Tarofder, & Hossain, 2015; Khalek & Ismail, 2015), consumer behaviour study related to halal bakery products is still lacking (Mathew, Abdullah, Binti, Ismail, & Binti, 2014).

Current research applies Theory Planned Behaviour to understand purchase intention among halal bakery consumer. This theory has been commonly used in investigating consumer purchase behaviour. According to Ajzen and Fishbein (1977), human behaviour is directed by three sections of thoughts, namely attitude, subjective norms, and perceived behavioural control. Hence, it is beneficial to determine the influence of halal foods on purchase intention among consumers from the lens of TPB (Aditami, 2016; Afendi, Azizan, & Darami, 2014; Madden, Ellen, & Ajzen, 1992).

## 2. Problem Statement

In the production of bakery products, flour is used as the essential and principal ingredient for the base product, while toppings, frostings, and fillings are included to complete the baked items. Other ingredients that are commonly used to finish the baked products are emulsifiers (Funke, Golitz, & Illertissen, 2009), chocolate (Mohos, 2017), butter (Bent, Bennion, & Bamford, 2013), and gelatine (Karim & Bhat, 2008). Some ingredients are imported from abroad, including non-Islamic nations (Ahmad, 2015). As a result, some bakery food products may be tainted with non-halal ingredients, such as porcine derivatives (Norraakiah, Azim, Sahilah, & Salam 2015), alcohol (Department of Halal Certification Eu Accreditation, Certification, Authentication, Research, 2018), as well as mixture of halal and non-halal ingredients (food adulteration) (Hall, Sharples, Mitchell, Macionis, & Cambourne, 2008). Emulsifiers are commonly associated with porcine derivatives (Funke et al., 2009), whereas butter, cheese, and chocolate are linked with food adulteration to minimise production cost (Shariff & Lah, 2014). Similarly, the addition

of alcohol in bakery products is not new since alcohol not only offers antioxidant properties, but also known to give flavour, moisture, and a tender crust to the baked goods (Maner, Sharma, & Banerjee, 2017).

Eating practices, perceptions, and attitudes towards foods for consumption may affect one's way of living, particularly in the context of the Malaysian population, which is a melting pot of ethnicities, beliefs, and customs (Omar & Omar, 2018). Some food producers are concerned about preserving the authenticity of the foods and would not compromise replacing or removing certain ingredients during food preparation (Tsai & Lu, 2012). This hinders consumers with certain beliefs and principles from savouring foods made available to the market. Producers need to produce food products that can be consumed by all consumers regardless of beliefs. The halal concept, which has turned into a worldwide concept (Afendi et al., 2014), may serve as a yardstick for both Muslim and non-Muslim consumers (Samori, Ishak, & Kassan, 2014).

The consumers' consciousness, perception, and willingness to accept the halal concept have been proven as significant factors for purchasing halal foods among Muslim consumers (Shah Alam & Mohamed Sayuti, 2011). Unfortunately, studies related to consumer purchase intention towards halal bakery products are still limited (Mathew et al., 2014). Elasmag (2016) stated that despite the halal business operating in a difficult market, there is an untapped area with high potential to grow. This is an opportunity to draw a wider range of the halal market by focusing on all consumers regardless of their beliefs, particularly amongst those who seek healthier and safer bakery products for consumption. Therefore, it is imperative to apply the TPB concept in assessing consumer behaviour towards halal bakery products in the most populated district in Selangor, which is bound to influence their purchase intention behaviour.

### **3. Research Questions**

What are the correlations between TPB attributes and purchase intention towards halal bakery products among consumers in Petaling district, Selangor?

### **4. Purpose of the Study**

To examine the correlations between TPB attributes and purchase intention towards halal bakery products among consumers in Petaling district, Selangor.

### **5. Research Methods**

In this study, a quantitative non-experimental correlational survey was conducted to determine the correlations between the variables, namely TPB attributes, and purchase intention towards halal bakery products. A quantitative design was applied to seek valid information in addressing the research questions regarding consumers' purchase intention towards halal bakery products. Additionally, a non-experimental design was applied, wherein condition was neither manipulated nor altered, and only relationships between the variables were examined.

### **5.1. Instrument development**

The development of the instrument and its validity and reliability were described in Nurzulain, Zuraini, Norhidayah, and Muhammad (2019).

### **5.2. Data collection**

The questionnaires were distributed to purchasers of bakery products at selected bakery shops situated in the Petaling district, Selangor. A purposive sampling method has opted in this study because this study focused on consumers who purchased bakery products in the respective areas at the Petaling district. At each identified area, a total of 100 questionnaires were distributed to the targeted respondents. This is to allow the direct approach to respondents who purchased bakery products. Several screening questions were asked before the targeted respondents answered the questionnaire. The screening questions were asked to ensure that the respondents did fulfil the inclusion criteria; aged 16 years old and above, residing in Petaling district areas, as well as purchased and consumed any type of bakery product.

### **5.3. Data analysis**

The data were subjected to SPSS (version 24) (SPSS, Inc.) for descriptive statistics and multiple linear regressions. Prior to the analysis, the data were subjected to the data cleaning process and, also ensuring all data collected fulfilled the inclusion criteria. The postcode of the residing area of the respondents was screened once again and those with different postcodes other than the Petaling district area were excluded. In this study, assumptions related to multiple linear regression analyses were investigated before the application of the analysis in examining the correlations and the main predictor that influenced purchase intention of halal bakery products among consumers in the Petaling district, Selangor.

## **6. Findings**

### **6.1. Characteristics of respondents**

Out of the 500 questionnaires distributed, only 476 sets (95.2%) were analysed using SPSS version 24. The remaining data were excluded due to their excluded residential area. Majority of the respondents were females (n = 284, 59.7%), age range between 21 and 25 years old (n = 102, 21.4%) and obtained tertiary education (n = 156, 32.8%). Slightly more than fifty per cent of the respondents were Muslims (n= 243, 51.1%).

### **6.2. Assumptions prior to multiple linear regression analysis**

This study encompassed a huge sample (476 respondents) and accordingly, from the normality test, the distribution of the data was normal. Besides, it was observed that all independent variables did not have tolerance level that is less or equal to 0.01, and all VIF values were well below 10, hence no multicollinearity was observed (Table 1) (Kleinbaum, Kupper, Muller, & Nizam, 1988).

**Table 01.** Tolerance and VIF values for multicollinearity assumption

Variable	Tolerance	VIF
Attitude	.198	5.057
Subjective Norm	.219	4.559
Perceived Behavioral Control	.377	2.649

**6.3. Relationship between TPB attributes and purchase intention and its main predictor**

Table 2 summarises the outputs retrieved from Pearson correlation and multiple linear regression analyses. The findings showed that all the TPB attributes are largely and significantly correlated with the dependent variable ( $p < 0.05$ ). As shown in Table 2, the attitude was shown to have the largest correlation coefficient. In addition, the findings indicated that all hypotheses are accepted. The multiple linear regression analysis showed that, at 77.5% of the variance. The regression analysis showed that attitude ( $\beta = 0.411$ ,  $p < 0.05$ ) emerged as the main predictor that influenced consumer purchase intention towards halal bakery products, followed by perceived behavioural control ( $\beta = 0.378$ ,  $p < 0.05$ ) and subjective norms ( $\beta = 0.154$ ,  $p < 0.05$ ).

**Table 02.** Correlation and multiple linear regression outputs

Variables	PI	ATT	SN	PBC	B	$\beta$
<b>Purchase Intention (PI)</b>	1.00					
<b>Attitude (ATT)</b>	0.840*	1.00			0.414*	0.411*
<b>Subjective Norm (SN)</b>	0.797*	0.877*	1.00		0.173*	0.154*
<b>Perceived Behavioural Control (PBC)</b>	0.812*	0.777*	0.748*	1.00	0.389*	0.378*
<b>Means</b>	2.827	2.819	2.667	2.958		
<b>Standard Deviation</b>	0.572	0.568	0.510	0.556		
					<b>R<sup>2</sup> = 0.775</b>	
					<b>Adjusted R<sup>2</sup> = 0.774</b>	
					<b>R = 0.880**</b>	

\*Note:  $p < 0.05$

**7. Conclusion**

The study outcomes signify that all TPB attributes were statistically significant in determining purchase intention among consumers in the Petaling District, Selangor, in which attitude appeared to strongly influence the purchase intention towards halal bakery products. However, this study is yet to achieve a better understanding of halal food purchasing behaviour and in identifying the rationales for purchasing halal bakery products. Further study should be carried out to investigate the impact of religion on consumers purchase intention, as well as their actual purchase behaviour. As an overall implication, this study offers valuable and important information for consumers and food manufacturers in identifying the

most viable and effective strategy to fulfil the needs of consumers, apart from being able to meet the characteristics of halal bakery products.

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